#### MINUTES

Washington-Microsoft Partners in Learning Project
December 8-9, 2004
Seattle Marriott Waterfront

Lunch and introductions. Ms. Rettew and Ms. Broom called the meeting to order at 1:00 p.m.

Roll Call: Members Present

Wilma J. Alkire
Allen Allen
Michael Allen

Idalia Apodaca Stacey Ellmore Denny Heck

Lisa Holmes

Anne Houston-Rogers Chip Kimball Gary Kipp Gary Livingston

Senator Rosemary McAuliffe Sheila Valencia Jim Meadows Min Li Laura Pierre-James Cap Peck

Desiree Pointer-Mace
Ronn Robinson
Rep.Gigi Talcott
Jennifer Wallace
Ellen Wolfhagen
Jennifer Vranek

Project Co-Chairs

Ms. Broom
Ms. Rettew

Members Absent

Judy Hartmann Ruta Fanning

Senator Jeanne-Kohl Welles

Rep.Phyllis Guttierez-Kenney

Others Present

Judy Margrath-Huge Susan Jeffords Stephen T. Kerr Sheila Valencia

Min Li
Cap Peck
Nancy J. Vye
Joanne Carney
LeAnne Robinson
Michael Henniger
Judy Mitchell
Leslie Goldstein

Staff Present

Nancy Coverdell Patsy Ellis

Ms. Rettew and Ms. Broom thanked everyone for their attendance and participation. Ms. Rettew indicated that members were invited to take part in this project because of their individual expertise. Ms. Broom spoke briefly on behalf of Microsoft and mentioned those in attendance are all part of a larger initiative. Groups similar to this one are meeting across the country. The groups get together on a national level to help fuel information that the states are interested in. This is a United States and International project.

Ms. Rettew provided a handout and referenced that the materials can be located at the website www.governor.wa.gov/parternship

What is the purpose and why is the Governor interested in partnering? There's an interest in looking at how technology is changing teaching and learning. Washington is one of only six states selected to participate in this program. Each of the states participating has a different emphasis with unique project goals, but all are expected to leverage successful changes in teaching and learning statewide—even nationally or internationally. This is a public-private partnership. The focus is on helping pre-service and practicing teachers utilize multiple technology—rich assessments for diagnosing individual student needs that will be used to drive student—centered instruction. The

project will also focus on linking education standards, expected learning outcomes, lesson plans, scoring rubrics, classroom based assessments, and other assessments, including the WASL. We want to make sure that "at risk" kids are a high priority and that they receive the benefits of the grant.

Microsoft has committed to provide up to three million dollars to Washington State. The six public Colleges of Education will be invited to compete for a portion of those funds to help pre-service teachers to develop their expertise in using technology-based tools and assessments. Funds will also be made available to another entity to work with at-risk students in a K-12 setting.

Because time together is insufficient and constrained, Council Members were encouraged, throughout the meeting and afterwards, to take lots of notes. This includes use the writing boards or any other method to communicate thoughts and ideas and phoning and e-mailing ideas after the meeting adjourned.

Council Member roles were explained as helping to develop the project guidelines, the framework for the Request for Grant Proposal. This framework includes helping teachers and administrators understand the value of using technology in the classroom including how technology is already changing the way we teach and learn.

Ms. Rettew explained that the agreement to date has already identified the following project guidelines: help teachers and administrators understand the value of using technology in the classroom; change the way we teach and learn; combine pedagogy and technology in innovative ways in the classroom; produce results that other schools, states, and nations can use; establish a foundation for continued advances in education and technology; demonstrate the use of  $21^{\rm st}$  Century technology skills; focus on digital inclusion in our schools; include improvement measures for the state's most at-risk populations; include teacher development plans; and promote a culture of continuous improvement.

The issue of ethical standards was discussed. State employees contracting on behalf of the state are to maintain strict ethical standards and must avoid real or apparent conflicts of interest. Council Members are acting on behalf of the state. After consulting with attorneys, it was recommended that members be provided with a handbook and were asked to sign and return the Conflict of Interest and Confidentiality Statement to either Nancy Coverdell or Patsy Ellis. Ms. Rettew asked that participants keep in mind what conflict of interest means to them. She explained that a school principal participating on the Council, for example, could not apply for a grant herself, but her school district could so long as she did not help the district in any way. Members must be able to participate in an unbiased and objective manner and must not divulge confidential information.

Ms. Rettew stated the group would be shaping the initial framework for the RFGPs (Request for Grant Proposals) at this meeting. The next meeting will be in Olympia on Friday, January 14, because the legislature will be in session. The Council will go over the first draft of the RFGP on January 14, 2005. On February 11, 2005, there will be a public pre-bidders conference – this is the opportunity for potential grantees to come and ask questions. Grant request proposals

will be due March 25, 2005. The Council will meet on April 7 and 8, 2005, to consider submitted proposals and go through the selection process.

Council Members were asked to consider the exercise of framing the RFGP by visualizing how technology can change teaching and learning; by listening and responding to presentations; and by considering five key questions: What problems should be addressed? What goals are important to pursue? What deliverables should we expect? What data do we want collected? What strengths already exist that we should build upon?

Scoring of the proposals was discussed. Only the elements contained in the RFGP can subsequently be used to evaluate and score the proposals. It is critical to think through what elements are needed in the RFGP. OFM has contract experts who recommend a standard way to score proposals – points are allocated for each of three components: technical, management, and budget. How the Council wants to score the proposals is something to decide. The Council could award grants solely based on written proposals or select from the written proposals and invite top candidates to present orally.

Council members were asked: "How can we provide clear direction to grant proposers when we are not education and technology experts ourselves?" The response was each council participant has expertise in at least one, probably more areas - education, technology, policy or business. All members are very familiar with what our education problems are in Washington. The discussion was concluded by acknowledging that "education and technology" is an emerging field, and there aren't many experts who fully understand how technology is changing teaching and learning practices.

Included in the background information was the web address where members were advised they could find a brief review related to how technology can enhance education. A brief overview was provided to set the stage for subsequent presentations. Technology provides a way to organize information, expand learning opportunities, change how we communicate, and make learning a visual experience. A few examples were given. Students across the country are collecting local pollution information and posting it to a shared website. There is technology already developed that allows teachers to know instantly if their students have understood what they have tried to teach. There are applications using high quality video clips of teachers who then analyze the instruction, like a sports team looking at a game. There are simulation models that allow students to learn how to fly a rocket ship or to dive to the bottom of the ocean. The Internet has created a worldwide classroom.

Ms. Allen, the facilitator, introduced herself and laid the ground rules for the meeting. She expressed how she would like everyone to be on a first name basis and would like to allow Ms. Broom and Ms. Rettew to participate in the meeting. Ms. Allen told the Council Members that their role is to think today and tomorrow about what to include and exclude in the Request for Grant Proposals (RFPG). Ms. Allen stressed how everyone should participate, give others room to think, acknowledge opposing view points graciously, help others by clarifying what was said and make sure everyone's ideas are heard. She explained that

Council Members are acting as an advisory group. Ms. Allen concluded by saying she hopes the meeting is enjoyable, energizing and fun.

Ms. Broom, Partners in Education program manager and co-lead on the project, spoke next. Ms. Broom explained that this is a new way for Microsoft to work. Microsoft has been active in education for a long time. Ms. Broom has been with Microsoft for 12 years, eight years in education. Microsoft's mission with this public/private partnership is, through the power of technology, to enable people throughout the world to realize their full potential. Working with educators, policy makers, parents and other partners to provide innovative products, solutions, and programs to build a rich platform for the  $21^{\rm st}$  Century learning and school management. Microsoft wants students to realize their full potential. To reach this goal, Microsoft wants to work together to create a shared vision, identify and help solve the challenges facing educational institutions that are keeping them from realizing their potential, create relationships and partnerships with innovators in education and technology, promote innovative uses of technology and invest in teacher development, creating communities of practice, and providing resources that support technology enhancing teaching and learning.

Ms. Broom told the group one of the key recommendations she and Ms. Rettew had already made to the Governor's executive staff was the need for a K-16 education and technology plan. She addressed the need for a comprehensive and coordinated approach to education and technology issues. Ms. Broom pointed out that there are many technology savvy groups here in Washington working on education including Microsoft, Boeing, Washington Mutual, the Allen Foundation, and the Bill and Melinda Gates Foundation. She stressed the need for an annual cabinet level meeting with business heads, the Governor, legislators, and agency heads to create a statewide education and technology vision and plan and to make sure we are coordinating our resources and efforts. She emphasized the important role business has to play.

Microsoft is promoting digital inclusion. About two years ago Microsoft had a severe image issue. The company has been working on product development, security issues, and how to partner effectively with the public sector. Many meeting and planning sessions have taken place. Microsoft is facilitating access to technology and contributing to capacity building so that people can benefit the most from digital mediums. Ms. Broom stressed how we need to communicate why this is an integral structuring feature of our society.

Ms. Broom provided background information about the Partners It's an American Learning Program. Microsoft is a global company. company doing business overseas. Microsoft started the Partners in Learning Program to develop programs and missions that really were more beneficial outside of the United States. Economic bases will come from outside the United States. The company decided to focus on community affairs and education around the world and will now focus on digital Education - partners in learning, formal K-12 education, inclusion. community affairs, non-formal after school programs, and the senior program. Funding is narrowly targeted into this issue with unlimited potential grants. Microsoft has made a \$250 million worldwide There are 100 people who build private-public investment. The company wants to share best practices and build a partnerships.

knowledge base. There is a great need for access. In developing countries, Microsoft can license students at \$2.50 a head. In industrialized countries outside the United States, 25 percent of their most disadvantaged schools get the same opportunity. Microsoft would like to get to that point in the United States. Ms. Broom explained that \$3 million is available for the Partners in Learning grant in Washington and explained how Microsoft is making these initiatives very local. In the United States, the Partners in Learning program has \$35 million and six people focused on this full-time. A number of areas are being looked at including: Teacher/Leader Development, Curriculum, Assessment/Certification, Support and Research.

Ms. Broom explained how the program is working in other states. Microsoft is working with the Governor's Office in five other states as well as Departments of Education and other major business partners. Who are the five other states and how were they selected? They are Virginia, Michigan, New Mexico, Florida and Pennsylvania. The criteria for selection involved geographical location, a strong governor committed to education, strong Department of Education, and pre-existing relationships. These are five-year public-private partnerships between the states and Microsoft. Focused on providing investment funding for innovative solutions that have yet to be developed or deployed by the state due to resource limitations. Looking at long-term strategic investments that yield a sustainable solution.

Ms. Broom explained the uses of the grant money. The Partners in Learning program is not intended to be a one-time funding for the purchase of software solutions that are currently available. It is an investment in solutions and innovations that can be leveraged by other states, even nationally. Funding is also allowed for current initiatives that are lacking sufficient budget resources. It is not a predetermined grant. Partners in Learning is a collaboration between Washington State and Microsoft Corporation.

Ms. Broom provided the history of the project in Washington to date. In November 2003, conversations took place with Governor Locke regarding Colleges of Education and at risk communities. In December-April 2004 a working group was created. In April, Governor Locke made the decision. In May, the MOU was signed. In July, we welcomed Ms. Rettew. In October the charter was signed. Ms. Rettew worked on creating a very diligent charter. An Advisory Council has been created to help us decide how investments will be made.

Ms. Broom concluded her remarks by talking about best practices. What does best practices in the Microsoft world mean? It means building a statewide student information system. What do teachers do when they get it? It doesn't mean anything if you don't know how to use it. Teachers need to know how they can access this. We will document the whole process and put it up on the website, talk about it at conferences, etc. It's about public sharing.

Dr. Desiree Pointer Mace, research scholar at the Carnegie Foundation for the Advancement of Teaching, gave a presentation on "Learning from the Wisdom of Practice: New Technologies and New Texts for Teacher Preparation." She explained that their mission is to change teaching by changing teacher education. This is done by documenting and sharing the wisdom of practice. She mentioned the importance of making

teaching public in whatever ways possible, such as using multi-media to capture actual teaching sessions. She discussed some exemplary teacher practices captured in the CASTL program and the need for preservice teachers to practice evaluating one another's work while still in the College of Education classroom. Dr. Pointer Mace explained the need for pre-service teachers to step up to the plate by practicing, giving, and critiquing oral presentations in order to provide preservice teachers with plenty of practice. She mentioned the need for students to practice being a student teacher in their own classroom before getting into a K-12 classroom. She provided a video clip demonstrating effective teaching techniques and discussed the need for pre-service teachers to use these practice sessions as a way to pick among an assortment of best practices in order to facilitate a successful discussion in class. A handout was provided.

A comment was made that the program looked impressive but is there any evidence that the students learn better? Carnegie is trying to develop a study to look at what the outcomes of this teacher preparation approach are. The expectation is student achievement will improve based on the use of these improved teacher preparation practices. There's an effort to follow the student teachers' work and follow them into their first couple years as novices. She stressed that results cannot be fully assessed and the value seen until a few years out and stressed the need for ongoing public conversations between teacher educators in order to provide a rich exchange of best practices. Because this kind of dialogue and exchange takes time away from teaching, incentives are needed. Carnegie pays CASTL teachers \$1 to \$3 thousand dollars, in order to recognize the value of this practice. She concluded with an invitation to contact her and to learn more about the program at their website: www.carnigiefoundation.org

Dr. Micheal Henniger, Associate Dean at Woodring College, Western Washington University, discussed Western's commitment to integrating technology into teacher education at all levels. In addition, Western has imbedded technology teaching into the teacher education departments by hiring faculty who are both content area specialists for their department and technology experts. Dr. Joanne Carney serves in this role for elementary education and Dr. Leanne Robinson is our content/technology expert for special education. Drs. Joanne Carney and LeAnne Robinson were introduced.

Dr. Joanne Carney and Dr. LeAnne Robinson noted that Western is educating 14 percent of the newly certified teachers and has a current enrollment of 1,400. Western offers Masters Degrees and Certificate Programs. They noted how extensively the college is engaged with their K-12 partners, as well as the Whatcom community. The college is involved in standard based reform efforts, state and national initiatives, and creating educators for the 21st century. Some of the many initiatives noted, were participation in the federal "No Limit" program, the Digital Learning Commons, and the North Cascade Science Partnership.

They emphasized how the college, like their K-12 counterpart, has moved toward a competency-based system. The college has established teacher education performance standards, and uses electronic portfolios where pre-service teachers must demonstrate and document proficiency for each standard. Incorporating essential academic learning requirements into

pre-service lesson plans, curriculum and assessments furthers alignment with  $\mbox{K-}12$ .

Drs. Carney and Robinson addressed the question: "What are some of the challenges for preparing educators for the 21st Century?" identified the following: diverse student populations, many lowincome, students of color, English language - learners (students speak hundreds of languages), and students with disabilities. They discussed how teaching approaches traditionally have targeted the "middle" of the class and discussed how inappropriate this is. They explained that there is no real middle. Some students are bored because they are way above the middle. Others are way below the middle and are disengaged. Those who are in the "middle" may or may not understand the material being taught. Also, many traditional teaching methods don't work in diverse populations and students subsequently don't relate to either the teachers or the materials. There is also lack of equal access to learning opportunities - there is uneven teacher quality, curricular resources, and technology available to different student populations. Given these disparities and inequalities, the question is "How do we deliver quality instruction to all?" Teacher turnover is about 50 percent per year. Given these kinds of issues, they stressed the need to re-think delivery of instruction and emphasized the need to empower students to become self-motivated learners who can take initiative to expand their own learning opportunities, particularly using such resources as the internet.

It's about student learning, Student learning is the target. standards, curriculum and assessment. Complex performance-based assessments combined with the use of curriculum-based measures are important to capture the full range of learning that occurs. Using multiple measures and techniques that are based in standards can provide valid and reliable measures that allow for comparisons, as well as aggregate data. They concluded by stressing how teachers must know how to use technology, integrate it with the curriculum, and tailor it for individual instruction. They stated the need to support ongoing professional development for teachers that are focused on student achievement. Professional development must be anchored in content knowledge, tailored to educators' needs, integrated with teacher certification and professional growth, based on mentoring or coaching models, and aligned with school

Dr. Judy Mitchell talked about three things: teaching at college level, K-12 student learning and assessment. Related to teaching, she discussed the current quality movement that is well defined and is entrenched at both the federal and state level. (The "No Child Left Behind Act", and Washington Education reform/WASL). She noted that school reform was a longtime in coming to teacher education. explained their needs to be a sustained emphasis on professional development on the job. She mentioned the need for stronger connections among teachers and all other school professionals in order to exchange information about best practices in a fluid, on-going, manner. Greater utilization of distance education is becoming more prevalent and will continue to grow, she noted. This includes growth in the use of the Internet and online video conferencing. Colleges of Education will become more focused on research/policy/graduate education/train the trainers. The Colleges of Education face the demands created by an increasingly diverse population, changing demographics, numerous language differences, and the persistence of the achievement gap. Washington State University (WSU) has been very engaged in recruiting and promoting the teaching profession to prospective students who are of color and from different ethnic backgrounds. She mentioned how WSU has also sought to make instructional materials more socially and culturally relevant. Dean Mitchell also stressed how WSU has strengthened parent and family involvement.

Dean Mitchell discussed how high schools have changed dramatically over the past decade. There is a stronger career orientation, higher standards that are creating more post-secondary opportunities (creating increased enrollment demands on two and four year colleges), greater emphasis on aligning standards and curriculum across the secondary and post-secondary sectors, and an increased effort to use formative assessments. Because the vast majority of high school graduates will go onto two-year colleges, not four-year, the relationships between K-12 and the two-year system have been even more emphasized.

Dean Mitchell next discussed the need to move away from achievement testing to a standards based performance evaluation approach. She discussed the linkage between standards, curriculum, and assessment. She talked about the need for greater emphasis on formative assessments and the need to help students monitor their own progress. And, she stressed how technology is enabling these kinds of transformations in teaching and learning.

Recognizing the complexity of student learning, she talked about the need for more emphasis on choice at all levels, the increased need for data based decision making, and the need for institutions to have the technology hardware, software, and training to help manage data and facilitate communication.

She gave a quick overview of some of the initiatives underway at WSU and noted that WSU is a complex institution with four campuses—they do not have stand—alone campuses. Highlights about programs included WSU's emphasis on diversity, with major efforts in their "Future Teachers of Color" and "Future Leaders of Color" initiatives. She noted that WSU has become a "go to" school for scholars interested in diversity. She discussed how seriously WSU takes their partnerships with school districts and discussed the "Co Teach" program where there are partnerships with other faculty in the arts & sciences, community colleges and roughly 20 school districts. She pointed out that this work is taking place exclusively in high—need schools with very high levels of low—income students from diverse populations. She discussed the need for more diverse faculty and more infused courses at the college level.

Dean Mitchell discussed ways the grant could be used. She mentioned the need for stronger linkages between the arts and science undergraduate programs and the graduate teaching programs. She talked about how expensive on-line course development is and how we must continue to offer these opportunities, particularly in light of growing competition from for-profit competitors. She noted that the six public baccalaureates educate 85 percent of our teacher education students in this state. She emphasized the need to study the field of teaching and mentioned the Carnegie work on the study of the Doctorate. Video-

conferencing, filming and critiquing teachers in the classroom, and online tutoring and coaching opportunities are examples of ways we can improve teaching and learning. However, these are all expensive. WWU subscribes to a service to get feedback on how effective recent WWU graduates are at teaching, but it is complex and difficult to gather meaningful and comprehensive data. This is an area that offers an opportunity for improvement. Technology can help as teachers develop portable electronic portfolios. Dean Mitchell stated we need to define what should be in such a portfolio and what it would take to ensure it is coordinated, portable, and relevant on a statewide basis.

## Dr. Stephen Kerr, Associate Dean at University of Washington.

Dr. Kerr explained that the University of Washington (UW) offers graduate level teacher education and administration programs and that the UW is a research university. Their programs are oriented around the notion of a continuum - attracting people into the profession, preparing them while they are there, and then mentoring graduates and providing support for the first couple of years in the field. stressed how difficult the first few years in teaching are and how providing a supportive structure after they graduate helps them to persevere and enhance their teaching skills. The UW has been very engaged in studying how people learn. He mentioned Dr. John Bransford's work on how people learn (and noted his book by the same The UW has recently received a \$30 million National Science Foundation Grant to become one of three centers across the United States studying the science of learning. The UW is interested also in the question: How do you prepare teachers to be constant learners? demands on teachers have increased dramatically over the years. Teachers must now be able to deal with special education, English as second language learners, severe achievement gaps, and be able to find ways to bring these issues to the center of their instructional practices. The UW has received project funding from the Carnegie Foundation for the "Teachers for a New Era" initiative. This work is a joint effort with the arts and sciences faculty. The UW is treating teaching as an academically rigorous profession that is subject to the same kinds of high standards that other professions - like law or medicine require. He mentioned some other inititatives that are underway: The UW is creating an assessment system in science education. The UW is using video traces, which are annotated video recordings for teaching, and finding this to be highly effective. They are stressing the need for teachers to be more aware of their own teaching practices. Additionally, the UW College of Education is stressing the need for pre-service teachers to become more comfortable in using data. Historically, teaching has not been seen as data based. As information continues to explode, teachers are going to have to become even more voracious information consumers and be able to adapt their teaching practices. Teachers have to continuously be able to see how students are performing on a regular basis in highly diverse and demanding classrooms. Things like on-line electronic portfolios, robust infrastructure, and regular assessments, are critical to reducing the achievement gap.

Dr. Kerr summarized that more resources are needed in order to do a more comprehensive job of collecting and analyzing data. He noted how necessary, but difficult, it is to track graduates to assess their teaching effectiveness. There is a need to develop models that can be

introduced and scaled up, for resources to aid in the creation of new technology based tools, a need for creation of additional methods for displaying and communicating information to stakeholders, and a need to address the multiple pressures of teachers by providing adequate The UW is working on linking training, incentives, and support. standards and evaluation measures. However, measures that effectively evaluate the complexities of thinking and learning are very difficult to tie to outcomes in any simple way. Issues of race, ethnicity, and language add other layers that need consideration as well. There is over representation of minority students in special education, for example, because many of these students have cultural and language needs that are simply different from what teachers have been exposed to. There is a need to provide opportunities for teachers to network more and learn from each other. The UW College of Education is also developing a culture that encourages pre-service teachers to use assessment data routinely

Technology offers the opportunity to enrich the curriculum, to develop new types of instruction, and to use new resources like the web and the Digital Learning Common. Technology can change instruction from being "teacher centered" to "student centered" by giving students the technology to assess their own needs and to research their own interests. Students obtain skills of competency when they are engaged in a meaningful task. Teachers are frustrated now when students are disengaged - they don't know what to do. Technology can help to deliver a culturally diverse curriculum that meets the needs of students with different backgrounds. Technology helps us to grab data, massage it, display it, and use it, but non-numeric data is also important. Electronic portfolios offer a way to handle non-numerical information about student competencies and performance. Assessment systems we have are numerous but not complex. Teachers need to be able to make instructional decisions based on the data they have. Individual student assessment data is useful to help empower students. And, teacher assessments are important to provide feedback about effective practices.

#### Group work

The Council members broke into five groups as follows:

Problems: Jane Broom, Stacey Ellmore, Lisa Holmes,

Representative Gigi Talcott

Goals: Robin Rettew, Gary Livingston, Laura Pierre-James

Deliverables: Wilma Alkire, Denny Heck, Desiree Pointer Mace, Dr.

Kimball, Anne Houston-Rogers

Data: Michael Allen, Gary Kipp, Ronn Robinson,

Ellen Wolfhagen

Strengths: Idalia Apodaca, Senator Rosemary McAuliffe,

Jim Meadows, Ashley Peterson

## Group reports and discussion

The group on Problems reported the following:

(to be completed once notes are received from group leader)

The group on Goals reported:

- Promote a culture of continuous improvement that utilizes data based decision-making.
- Utilize performance-based assessments.
- Capture as much of the range and complexity of student learning as possible.
- Ensure assessment tools provide a way to continuously monitor student progress on a frequent, even daily, basis.
- Link assessment tools to intervention and remediation strategies.
- Link assessment tools to essential academic learning standards, grade level expectations, lesson plans, and textbooks.
- Ensure that assessment tools are user friendly, portable, and that they are generally accepted by teachers as a "great help" rather than a "great hindrance."
- Ensure that Colleges of Education work with school districts and the Office of Superintendent of Public Instruction to determine the effectiveness of the assessment tools they use, and to utilize a defined process for addressing future changes.

The group on **Deliverables** reported: Involved projects should demonstrate:

- 1. Collaboration of stakeholders
  - a. Identifying the parties affected directly and indirectly by their project, and shows a plan for collaboration—projects should show a system where you are working together to solve problems (unlike top-down "reform" from universities to school districts).
- 2. Ongoing assessment of student data that's qualitative and quantitative.
- 3. Articulated plan for technology support and development—ongoing, up-to-date support program that evolves to meet the needs of the programs, annually. To update the technology that you use.
- 4. Proficiencies for pre-service teachers and principals that demonstrate their preparation for a  $21^{\rm st}$  century classroom.
  - a. Data-rich
  - b. Collect, interpret and analyze data
  - c. 21st century skills as defined by national experts
    - i. Ken Kay's work
    - ii. ISTE standards
    - iii. Metiri group: NCREL's 21st century literacies
      - 1. Systems approach to a school system. What do districts have to have in place to support this so that learning can take place?
      - 2. Student skills piece is what we're interested in. Visual literacy, e.g.
- Responsiveness to a continuum of teacher learning and development.
  - a. Collegial support groups—"training the trainer" programs for new teachers/ new principals.

- 6. Periodic reporting of project outcomes.
  - a. Participating projects are required to periodically set forth the lessons learned and their recommendations and challenges, including issues related to dissemination. Those reports should describe clearly articulated and documented replicability and scalability.

## The group on Data reported:

- Demographic data on the institution (COE).
- What other grants does the COE have and how will this grant leverage those?
- Need to have comparative data (control group).
- Relationship between program and student achievement.
- Details on implementation with an eye towards replication.

#### The group on Strengths reported:

- Strategies for differentiation among learners based on multiple measures.
- Focus on diversity in recruitment, curriculum, instruction, and assessment.
- Recognition of the key role data and assessment play in teacher education.
- Acknowledgement of professional development needs of higher education faculty to be able to model sound, curricular, instructional, and assessment practices in their own teaching.
- Use of tools (video, audio) for showing effective practice, modeling, examining, applying, and evaluating one's practice based on the model.
- Technology is part of the culture of the institution and its teacher preparation.

Meeting adjourned at 6:00 p.m.

The meeting continued at 8:30 a.m. on Thursday, December 9, 2004

Ms. Marilyn Gogolin, Vice President of Pulliam, Education Testing Services (ETS)

Ms. Gogolin explained that ETS Pulliam provides educational web-based student data management, professional development and consulting services in a number of specific areas to meet the needs of schools and school districts nationwide. Ms. Gogolin has been in this business for seven years and has been following 200 schools working with local schools to create essential standards and classroom instruction, using data to inform instructional planning time and intervention. ETS Pulliam believes in research and that schools should continuously improve based on data. ETS Pulliam consists of 100 people - 60 are retired superintendents and the others are 40 members under the age of 34. The merging of old-fashioned education experts and technology savvy young professionals has helped to create a dynamic company.

Ms. Gogolin gave a demonstration of a software program that links state standards and assessments called the Instructional Data Management System (IDMS). IDMS provides an integrated approach to manage and use academic data to drive instructional practices and improve student achievement. The system utilizes state standards and provides analysis

of individual student progress that allows teachers to target and personalize individual instruction. The software prompts teachers to identify which standards they are teaching and when students are expected to be able to demonstrate mastery of those standards. library of assessment items is available for each standard and the sub elements of those standards. There is also a curriculum quide and specific lesson plans available to teachers to help them provide meaningful interventions when their students need more instruction. The results of the assessments are automatically loaded into an electronic grade book. The software also produces automatic report cards and updates classroom rosters at least once a week. students take one of these assessments, teachers get data back within 24 hours. When ETS works on implementing a system for a particular school, district, or state, the software is tailored to meet the needs of the client, including loading state specific standards and assessments. Teachers are using these results to share best practices. The system shows which classrooms and which teachers are having the most success.

Ms. Gogolin gave an example from a school district in southern California. 120 students out of 410 had not mastered a  $9^{\rm th}$  grade math standard. Yet seven teachers had classes that had hit a performance level of 95-100 percent. These results enabled the teachers to ask what these seven were doing that the others were not. The 120 students who had not met standards were put into classes with the seven exemplary teachers. Within a week 101 of the 120 students had met standard.

IDMS is currently available in nine states. Some of these include: California, Hawaii, Nevada, Arkansas, New Jersey, West Virginia, and New York. The largest number of students served in one district is 400,000 and the smallest size using IDMS is 72.

There are competitors but they don't offer the same full range of services. They are mostly data warehouses and no one has the built-in curriculum guide.

Jennifer Wallace, Executive Director, Professional Educator Standards Board (PESB)

Lin Douglas, Director of Alternative Route Programs, (PESB)

Ms. Wallace explained what the PESB does including: Voice of practicing educators in policy decision affecting them; Formal Advisory to State Policymakers; Oversee basic skills and subject knowledge test; and, Administer alternative routes to teaching program.

Lin Douglas, Director of Alternative Route Programs, PESB, discussed teacher preparation - when, where, and how it is needed. Washington doesn't have a statewide teacher shortage but does have persistent shortages in specific geographic and subject areas. Prospective teachers - changing demographic/changing demands.

Ms. Douglas discussed the move away from courses and credits to learner outcomes and common performance indicators that drive curriculum and formal learning opportunities. This a fundamental change for the Colleges of Education.

Ms. Douglas then explained the alternative route regional cross-institutional consortium model. This program seeks to:

- Recruit, prepare and retain from within communities;
- Partnerships multiple institutions, ESD and school districts;
- School-based, full-time mentored internships + formalized learning opportunities;
- Live text electronic portfolio; and,
- Early exit based on demonstrated competency.

The goals of the program include addressing supply issues and transforming from a Carnegie based approach to a performance-based approach.

She explained where the greatest technology-based assistance is needed:

- Technology-based tools for translating standards to learner outcomes/common performance indicators drive changes across programs
- Enhance access facilitate development and use online formalized learning opportunities (not just courses).
- Technology Pedagogy faculty training/capacity building.
- Statewide system that documents evidence beyond transcripts supports career-long portfolio.

Ms. Wallace described their recently released report entitled 'Math Teacher Count" and explained that these findings could be applied to all teachers and all subject areas. Highlights of the math report include:

- WA collects and reports no data related to the quality, quantity, access to or satisfaction with professional development.
- No central source of information exists on professional development providers or opportunities.
- Word gets around primary source of consumer/state evaluation.
- Standards for approved continuing education providers minimal and not aligned with research (JLARC and UW).
- Clock hours limiting; perpetuates "event" model.
- Need move to professional growth plans

Ms. Wallace described where technology based assistance is needed:

## Technical and Financial Support for Development and Implementation of New Statewide System

- Forecast and predict educator workforce demographics and quality indicators.
- Access initial and continuing needs and opportunities for professional development
- OSPI Proposal Professional Development Mgmt system -
  - Standards-based approval
  - Standards-based opportunities
  - Consumer-drive evaluation

 Support for development of training in educator use of new systems

#### Teacher Preparation - When, where and how it is needed:

- Tools and training to enhance access to performance based programs statewide.
- Technology tools and training to achieve common candidate performance expectations and indicators across program and create uniform online career-spanning portfolios.
- Build faculty capacity "Technology Pedagogy."

Mr. Chris Thompson, Executive Director, Academic Achievement and Accountability Commission explained that the A+ Commission is a nine member state body provided to oversee the state's K-12 Education Accountability System.

## WA Ed Reform Act (HB1209) Accountability is defined as:

- Assessment Reporting.
- Rewards.
- Assistance for struggling schools.
- State intervention in persistently low performing schools.

#### Duties of the Commission:

• Adopt performance improvement goals - assessment, WASL results & graduation rates.

## Accountability system development context:

- Commission began developing proposals in 2000.
- Federal legislation- No Child Left Behind Act (NCLB) passed in 2002.
- NCLB encourages states align accountability.
- NCLB accountability does not include non-Title I schools majority schools not providing in Title I funding.

# Areas of interest for accountability where technology could enhance efforts:

- WASL will be given in grades 3-8 (in 2006) there is a need for improved tracking of individual student progress, tracking mobility, and identifying different academic needs among students.
- Culminating student outcomes there is a need to link data related to drop-out rates, high school graduation rates, GED test results, postsecondary enrollment, and postsecondary degree/certification completion.
- Accessibility of local (school district level) data need to link local standardized assessments, student course taking, course grades, attendance, and disciplinary action. Need to look beyond just test scores to make an evaluation about a student, school or school district.

- Special program participant assessments results Need linked data to understand the needs and performance of certain groups including students in Special Education, students who are English language learners, as well as highly capable students. Data is needed to provide more accurate information about student outcomes. It is important to evaluate the performance of students in these programs and to monitor progress after they exit them.
- School level results by disaggregated populations Need to be able to compare districts with statewide results.
- Alternative means of demonstrating skill Need an objective means of assessing competencies other than the WASL for some students.
- Tracking, reporting multi-faceted student performances Need a comprehensive view of students, schools, and districts in order to gauge effectiveness.
- Assessment of subjects not on WASL History, Geography, Civics, Economics, Arts etc. are not now assessed, yet these are important subject areas that should be captured.

Ms. Kate Lykins- Brown, Communications and Legislative Affairs Manger, State Board of Education (SBE). Ms. Brown noted that the SBE is the oldest established education agency. It has 11 members and has responsibility for: K-12 rule making, the WASL, defining teacher preparation and certification requirements, professional development, setting minimum high school graduation requirements, construction for K-12, policy leadership and advocacy, as well as defining what goes on the official state high school transcript.

Ms. Brown explained that there is a great need for electronic high school transcripts in order to expedite the processing and handling of student data, to provide statewide information about course-taking patterns, and for improving access to student information by college admission officers in a timely and effective manner. Electronic data would enable research to be performed that now requires awkward hand-counted samples of student work in order to extrapolate on a statewide basis. For example, research indicates certain gatekeeper classes like Algebra 2 are critical for students to complete in high school in order to gain entry and succeed in post-secondary education. Yet, we are not able in this state to determine which courses students are completing.

Ms. Brown explained the SBE is putting together a transcript study group. This group is evaluating what it would mean to move to an electronic high school transcript system and is identifying what the barriers are to designing and implementing such a system.

**Dennis Small,** Director of Education Technology, Office of Superintendent of Public Instruction (OSPI)

Mr. Small discussed the technology and assessment needs in K-12. He asked, "How do we make sure that technology improves student learning?"

He stressed that we must not let technology drive education policy, but ensure policy and clear goals drive the technology.

He summarized the major technology needs from OSPI's perspective.

#### Data-driven decision making tools and professional development:

- Easy to use electronic tools that can provide timely data to inform instruction
- Electronic tools to communicate progress with students and parents (to kids and to parents, kids do better with parents involved).
- Professional development in appropriate and effective use of data (need to help them sort through data to improve instruction).

## Electronic assessment resources:

- Web resources to help educators better understand Essential Academic Learning Requirements (EALRs), Grade Level Expectations (GLEs), and released items.
- Standards-aligned diagnostic electronic assessment resources (i.e. license for Measures of Academic Progress (MAP) tests from Northwest Evaluation Association (NWEA) for state or asrisk schools).

## Aligned high-quality electronic curricular resources with assessments:

- Tested, aligned, and rubrics developed by/for WA educators.
- Leverage and expand current efforts: Use K-20 infrastructure, include current DLC pilot schools and make available to all schools in state, provide links from new GLE website.

Mr. Small described the new School Improvement Planning Web Tool OSPI has developed. He explained that with unique student identifiers it is possible to build electronic data systems for a number of purposes. He talked about the nine Educational Technology Support Center (ETSC) Programs around the state and explained that this model is highly effective. He encouraged the group to include the ESD's in the deployment aspects of the grant.

Mr. Small then described other efforts that are either being developed or are in the planning stage:

- Guidance web portal (beta testing now) allows students to connect with mentors;
- Student learning planning tool (this will be ready for the January conference) - it is an electronic tool that provides a record of student work and progress throughout high school; and
- Professional Development Management System.

Mr. Small concluded by noting there is a need for more statewide information and stated he will begin working on updating the state K-12 education and technology plan soon. Addressing what technology literacy means today is critical and there is a real need to prioritize and sequence education and technology initiatives.

Mr. Larry Davison , No Limit, Math/Technology Integration Specialist ESD 105

Mr. Davison gave a presentation on handheld technology and the No Limit project. No Limit is an "Enhancing Education Through Technology" project to infuse technology using problem-based teaching strategies in fifth through ninth grade classrooms. The mission is to improve mathematics instruction. The power of hand-held technology can be affective in problem-solving skills. A document camera is combined with student work in every student's hand in the classroom. The advantage is the simplicity and ease. The focus is narrowing the gap and giving more opportunities for students to work in groups with handheld technology. What can be done to be a better teacher and affect students in a more systematic way? A classroom where a handheld device is used is a very motivating piece because kids are in tune with handheld devices. How do teachers manage to step away and let students take a hand-held?

**Dr. Kimball -** Assistant Superintendent and Chief Information Officer, Lake Washington School District.

Dr. Kimball provided some background information about the Lake Washington School district. Lake Washington has 24,000 students, 42 buildings, a computer ratio of about 4:1. It has taken an aggressive technology approach since 1989. Lake Washington is located in a growing technology climate with such neighbors as Microsoft, Nintendo, and AT&T. Since the 1980's, the focus has included a student- centered profound commitment to professional curriculum, development, inculcating a culture of excellence and commitment based on data-driven decision making. The district focuses on the "I"-information rather than the "T"- technology. Lake Washington has spent over \$70 million in technology standardization, specialization, centralization, automation. The key is to evaluate whether or not educational impacts result from the use of informational technologies, not just to evaluate whether or not technologies are available.

Dr. Kimball talked about both the opportunities and the challenges with technology. He discussed the need for the Information Services Divisions to focus on providing leadership as well as support in the innovative uses of information. There needs to be a balance between strategic and tactical approaches, between balancing the needs of today with the undefined requirements of tomorrow - knowing when to invest and when to wait. Education is the last foundation industry to experience fundamental shifts in how it does business. Workplace is more dynamic than ever. All jobs require the use of technology. People change careers 10-14 times. Generation "M"- the Millennial Generation- know more about technology than the adults do who are teaching them. Over 90 percent of 5 to 17 year-olds use computers and most of them are on the Internet. Kids today spend more time on the Internet than they do watching television. It is the first time in American history that the younger generation knows more about what is fueling the American economy than the older generation. Technology is what is creating market growth. And, it is changing rapidly-the Internet, miniaturization, wireless, display technologies, enhanced audio/video connections, smart communications, artificial intelligence,

"edutainment", and technologies for diagnostic and facilitated interventions.

Technology is not the focus - learning is. Computers make learning visual. The opportunities are tremendous. Instruction can become more personalized, self-paced and students can receive immediate feedback on their efforts—as can teachers.

Need to first make sure the infrastructure and access is available before you can impact the culture and start using technology to really drive instructional change. First need is to adopt infrastructure standards. Secondly, there must be adequate technical support. Third, there must be access to technology. Access issues include such things as determining how often to refresh equipment, what the student to equipment ratio should be, whether to provide students and/or teachers with laptops, etc.

Enterprise questions must be routinely revisited. Organizations must have standards identified and consider such issues as obsolescence and replacement, implementation strategies, etc.

Changing the culture requires extensive training and support. There should be incentives for teachers and administrators to become proficient users of equipment and for incorporating it into instructional practices. There must be accountability provisions in place as well.

In the Lake Washington School District there is a three-pronged approach. First, all educators must be trained in using technology—this program is called "Information Navigator." This covers basic skills and is competency based. All employees must complete this course.

Graduates of the "Information Navigator" program are eligible for the "Information Integrator" program. This is a five-day institute focusing on powerful teaching and learning. It is a technology rich environment for student-centered constructivist learning. School allocations are based upon Integrator participation.

The third training tier is called "Information Synthesizer." This effort focuses on data based decision making at all levels of the organization. It focuses on real-time data and on understanding how to use data most effectively.

These training efforts are tied to evaluation systems and professional goals. Days are provided for staff to attend these sessions.

Examples of how technology is used include: staff development registration, personnel, publications, and program information. More sophisticated applications relate to integrating data including such systems as student information systems, fiscal, human resource, transportation, etc. ("Application hell").

Important to have a "portal" vision. Need one unified place that connects people to contextually relevant information, services, and applications. This must be a user friendly system where multiple users can collaborate, share data, document management, provide curricular applications, connect to teachers and students at home, etc.

The Learning Portal must connect teachers, students, parents, and the general public. It must provide e-mail opportunities, professional development, curriculum and learning opportunities, resource management, student administration, and general information.

System design must be web-based, grounded in standards, require minimal internal development, and provide extraordinary communication benefits.

Dr. Kimball concluded by addressing the one variable that really matters—student achievement. In order to improve student achievement, teachers and administrators must have better information about students' strengths and weaknesses based on data. Change must be driven by actual performance data. Most measurement tools used in schools today do not capture the complexity of student learning nor do they utilize what we do know about the science of learning. The role of teachers is changing. They must become sophisticated users of data to analyze student strengths and weaknesses. They must know how to access and use diverse sources of data. Performance requirements at both the state and federal levels are impossible to meet without using good data. Good data is impossible to collect and analyze without good technology. We must create a culture of data driven decision—making.

#### Ms. Ellmore, Senior Consultant, ACT

Ms. Ellmore provided background information about ACT. The organization was established in 1959, and is not-for-profit. It is dedicated to serving students, parents, and educators worldwide. ACT's mission is to provide information for life's transitions. ACT is a curriculumbased achievement test that explains what students know and are able to do academically and provides guidance for their future plans. The ACT is holistic and student-centered. ACT's goal is to accurately assess what students can do with what they know in four academic content English, Math, Reading and Science. For students who are deficient in one course, the trend seems to go down in other courses as well. There were 2.2 million college-bound students who took the ACT last school year. Of those, more than 1.2 million were members of the Class of 2004. In Washington State, 15 percent of students are taking the ACT. Virtually all colleges in the United States accept ACT scores for recruiting, admission, advising, course placement, scholarships, and financial aid. The Code of Fair Testing Practices in Education criteria for developing and selecting appropriate tests, interpreting test scores for fairness, and informing test takers. Curriculum surveys are conducted every three years. They are linked to state standards and actual classroom content, textbooks review, and secondary and postsecondary educator consultations. The results determine the content of the ACT assessment. The actual test items are developed by teachers and are peer reviewed. ACT score interpretation is norm-referenced which compares an individual student's score with scores of all other ACT-test students. It is also criterion-referenced and describes the specific academic skills and knowledge that a student has likely acquired, given the particular score range in which the ACT score lies. In Washington, a match study was done comparing state standards with ACT test items-a strong positive correlation was found.

Standards for Transition defined the specific knowledge content by subject area that each ACT score represents. This provides a way to

really begin connecting college expectations with what is offered in the high school curriculum.

Ms. Peterson talked about a new initiative in Colorado to test all high school juniors. She noted there has been a 34 percent increase in college admissions. Testing all students helps to level the playing field and to ensure a more ethnically diverse group attends college.

Ms. Broom and Ms. Rettew led a group discussion at the end of the presentations.

Concern was expressed that the state does not have a comprehensive education and technology plan that extends from kindergarten through college. As a result there has been a lot of duplication. Perhaps the grant can force people to talk and coordinate their work.

"Tried and true" methods are clearly not working—too many students are simply not meeting standards. Too many students are dropping out, too many students need remediation, too many high school students are unprepared for work.

How do we harness the energy, skill, and desire of this new generation?

Technology-rich assessments are needed. Changing the Colleges of Educations to become more learner centered is important.

It was asked if we could take a few minutes to talk about the focus of the other states involved in Partner in Learning projects. Ms. Broom indicated that Washington was the first state announced. The other states are looking at Washington and ready to see results. Florida is all about the statewide plan - building a plan from teachers up that includes policy, technology issues, and making sure data is successful and that it works.

Michigan is in flux. Michigan has done some work with general standards—work there is based in the standards movement and helping to get the teachers up to speed faster. They are working around leadership and developing an institute for technology.

New Mexico hasn't started yet.

Pennsylvania has received capital funding from the school district and is trying to find a way to develop a technology- rich school with student learning as the main focus. They need to create a mechanism of documenting that and sharing it at an international level.

A discussion ensued regarding what statewide technology architecture means. It was characterized as a coordinated, central, database that is built upon established technical standards. There are complicated policy decisions that underlie what data to collect and how to use it. Multiple efforts are underway at the state level, but they are not yet developed fully and they do not necessarily cross-educational sectors. The driving issue is how to get meaningful data down to the classroom level defined. A common student identifier makes it possible to have complex student driven databases work. Must work with the nine Education Service Districts to deploy any effort on a meaningful statewide basis. It was noted that the Office of Superintendent of

Public Instruction (OSPI) has good student information and assessment and records systems. There was subsequent discussion about the Digital Learning Commons initiative of the Governor. Discussion about the Paul Allen & Gates & Hewlett work ensued as well as some discussion about other public-private initiatives.

Rather than duplicate services we need to provide avenues for all districts across the state to find resources at a much-reduced cost. The students suffer because all of the players aren't coordinating (DLC, ESD, OSPI, COE, WISIPC, districts, vendors). An effort to bring all these agencies together and bring an assessment tool that is classroom driven is needed. What do you do with information from the assessments? How do you fill in the gaps for students?

Although there are now available retired WASL items on-line, there are no individual diagnostic tools to use. Must have political will and leadership to effectuate change in a meaningful, systemic way. Look at the changes in North Carolina. The focus must be on at risk students.

Discussion ensued about the nature of Washington politics and how we are a locally driven state—not a state that readily takes orders from the top down. The legislature has historically told local communities that the communities have the responsibility for determining how to get students to standard. It has been a tremendous cultural shift to get the state more involved. Contrary points of view were expressed. Many felt the increased role of both the federal and state government has changed the way communities view their roles. State standards are entrenched. The Federal "No Child Left Behind' law is here to stay. Annual testing is here to stay.

It was noted that the Digital Learning Commons was a budget proviso and had nothing do with statutory or legislatively driven policy changes. Public - Private Partnerships are going to continue and increase over time. There is not enough money or human resource to do it alone. Collaboratively we need to do what we can to get resources down to the individual classroom teacher about specific students. Technology-based assessments at an individual student level are needed.

Group discussion shifted to the idea of merging the two grants into a single grant. The focus of the grant would be on a single problem in a way that merges higher education & K-12 systems. The work should be integrated—it should not perpetuate independent systems in just higher education or just K-12. The \$3 million in five years is not much. Microsoft has brilliant people for technology and their expertise must be utilized.

Group discussion shifted to how we can help teachers teach in different ways. Teachers must know what the specific strengths and weaknesses are of each student in the class.

There is also a need to take the work that is being done by the Superintendents across the state about getting students to standards and bringing that dialogue to the Colleges of Education. There is a need for more uniformity. Pre-service teachers need to be taught using more common models.

Teachers also need to learn how to deal with diverse groups. This needs to be part of the mandatory pre-service teachers' work as well.

Another factor to consider is how teaching and learning change over time. We need tools to continuously assess progress. Assessment on a daily, weekly, monthly, semi-annually basis, etc. is critical in order to develop timely intervention strategies for at-risk students.

Discussion about "at risk" ensued. At risk is a student who is deprived. At risk could relate to uneven access to hardware and software. It may mean English Language Learners. It may mean boys. It may mean Special Education students. It means many different things. How do we address the "opportunity gaps" some students experience, particularly those arriving late to the school system, arriving from other countries, speaking other languages—yet they are expected to perform at the same levels as their peers do who have been here since birth?

There was discussion about the need to concentrate resources on secondary education—that the elementary system has been favored in the past.

There was discussion about narrowing the focus to the most pressing problem areas—math and science. Others felt the most pressing problem was equipment. Others expressed the need for better training.

The need to maximize limited resources was stressed. Where do we get the biggest return on investment? Is it by teaching the teachers, identifying certain teachers as coaches? Do we have the room for greatest growth by addressing the most at risk students—however "at risk" is defined? Are too many resources already being focused on those who are already doing well—the AP type students? Do teachers know what teaching to standards really means?

Discussion next focused on picking something that will be beneficial to students across the entire State and on helping to ensure students are prepared for the real world when they graduate—a world that is increasingly technology driven, where information gathering and analysis is critical. Students have to be able to compete with students from Korea or China in this global economy.

There was consensus that one grant is preferable to two and that a technical support team from Microsoft be attached to any effort.

The group agreed to initially define the term "at risk" as students who're not meeting standards on the WASL, without specifying which WASL or which grade. It was agreed that the respondents would be required to more specifically focus and narrow the definition of "at risk"

Discussion about a uniform assessment tool ensued. There was concern expressed about some districts' practice of "profiling" which students were likely to fail the WASL based on certain historical data. Discussion about empowering teachers to specifically know what a student can and cannot do is the only way to help each student. The need for more information was discussed—how WASL data by student, by classroom, by school, by by content, by strand, by grade level expectation, by item, is all needed and how this data must be looked at

over time—on a longitudinal basis. In fact, some suggested the data should be collected retroactively in order to create benchmarks. The group seemed to agree that connecting specific WASL data to specific interventions was necessary. The need for technical and policy analysis regarding privacy issues was discussed. It was also noted that the way teachers are taught has to change so they can do the kind of assessment being discussed. A comment was made that consideration has to be given to the expense of collecting and deploying data and how a system has to be put in place that will have a shelf life of more than a few years. Developing a system that is flexible enough that others can take advantage of it, adapt it to meet their needs, and ensuring they will be able to "grow it" and "scale" it is important.

Discussion next shifted to who should take the lead on the project - K-12 or higher education? The group agreed that either could be the lead, but they must partner with each other and they must include a Microsoft team. The point was made that the equivalent of the chief executive should be required to sign off on the project proposal as well. Whoever leads must also provide proof of their qualifications to handle a large, complex, technology- based education project. The applicant has to also show how his or her proposal could be applied statewide. There should be a control group as well in order to assess the effectiveness of the effort. How the piloted results could be ramped up must also be addressed. Pilot project results often go unnoticed. Having the Governor support the efforts and communicate results was discussed as being very important.

There was discussion about expanding the assessment data to include more than WASL data. It was pointed out that the Colleges of Education presenters had discussed the need for more comprehensive views of students, and the use of complex performance based assessments.

It was pointed out that there had been no discussion around leadership, people, and change management. If there is an expectation of really thinking about teaching differently there must be a strong leadership component. Teachers have to know they have the tools - the data - that lets them know how and what to teach students who are falling behind. Having assessment results sent out to assessment experts was also discussed, leaving teachers free to concentrate on the results rather than the process. The comment was made that assessment results should also be linked to professional development and that each school district should establish policies around data-driven decision making.

In conclusion, it was agreed that the following ideas had surfaced and seemed to have broad support:

- the project needs to be about data-based decision making;
- it needs to be systemic;
- it needs to have a leadership component;
- multiple data sets should be considered;
- WASL data should be down to the individual student and item level;
- "At Risk" will include "WASL deficient" students and the potential grantees will further define what it means in the context of their unique proposals;
- an architecture should be created that uses multiple resources of data, tied to state standards;

- the project will include a focus on delivering effective intervention and remediation strategies based on assessment results;
- the project can focus on either and/or both pre-service and/or practicing teachers; and,
- it must address people, process, and technology requirements.

The meeting adjourned at 5:15 p.m.